

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims, in the application:

1. (currently amended) A computer implemented method for gleaning file attributes independently of file format, the method comprising the steps of:
 - a non-application specific file attribute manager receiving a plurality of files in a plurality of formats;
 - the file attribute manager scanning the plurality of received files in the plurality of formats;
 - the file attribute manager gleaning file attributes concerning each of the plurality of scanned files in the plurality of formats;
 - the file attribute manager storing gleaned file attributes concerning each of the plurality of scanned files as records in a database; and
 - the file attribute manager indexing specific file attributes being stored as a record in the database concerning a specific file according to contents of that file.
2. (currently amended) The method of claim 1 wherein:
 - the specific gleaned file attributes concerning [[a]] the specific file are a function of a protocol according to which the specific file is transmitted.
3. (currently amended) The method of claim 1 wherein:
 - the specific gleaned file attributes concerning [[a]] the specific file are a function of the format of that specific file.
4. (currently amended) The method of claim 1 further comprising:
 - the file attribute manager indexing specific file attributes being stored as a record in the database concerning a specific file according to a secure hash of the contents of that specific file.
5. (currently amended) The method of claim 1 further comprising:

the file attribute manager indexing specific file attributes being stored as a record in the database concerning a specific file according to a cyclical redundancy check of the contents of that specific file.

6. (currently amended) The method of claim 1 further comprising:
the file attribute manager receiving a plurality of copies of the same file; and
the file attribute manager storing a separate record for each received copy of the file, each separate record being indexed according to the contents of the file, such that each separate record can be accessed by a single index.
7. (original) The method of claim 1 further comprising:
deleting records from the database after the records have been stored for a specific period of time.
8. (original) The method of claim 1 wherein the non-application specific file attribute manager is incorporated into at least one of the following:
 - a firewall;
 - an intrusion detection system;
 - an intrusion detection system application proxy;
 - a router;
 - a switch;
 - a standalone proxy;
 - a server;
 - a gateway;
 - an anti-virus detection system;
 - a client.
9. (currently amended) A computer readable medium containing a computer program product for gleaning file attributes independently of file format, the computer program product comprising program code for:
 - receiving a plurality of files in a plurality of formats;
 - scanning the plurality of received files in the plurality of formats;
 - gleaning file attributes concerning each of the plurality of scanned files in the plurality of formats;

storing gleaned file attributes concerning each of the plurality of scanned files as records in a database; and
indexing file attributes being stored as a record in the database concerning a specific file according to contents of that specific file.

10. (currently amended) The computer program product of claim 9 further comprising:

program code for gleanning specific file attributes concerning a specific file as a function of a protocol according to which the specific file is transmitted.

11. (currently amended) The computer program product of claim 9 further comprising:

program code for gleanning specific file attributes concerning a specific file as a function of the format of that specific file.

12. (currently amended) The computer program product of claim 9 further comprising:

program code for indexing file attributes being stored as a record in the database concerning a specific file according to a secure hash of the contents of that specific file.

13. (currently amended) The computer program product of claim 9 further comprising:

program code for indexing file attributes being stored as a record in the database concerning a specific file according to a cyclical redundancy check of the contents of that specific file.

14. (currently amended) The computer program product of claim 9 further comprising:

program code for receiving a plurality of copies of the same file; and
program code for storing a separate record for each received copy of the file, each separate record being indexed according to the contents of the file, such that each separate record can be accessed by ~~the~~ a single index.

15. (original) The computer program product of claim 9 further comprising:

program code for deleting records from the database after the records have been stored for a specific period of time.

16. (currently amended) A computer system for gleaning file attributes independently of file format, the computer system comprising:

- a reception module, configured to receive a plurality of files in a plurality of formats;

- a scanning module, configured to scan the plurality of received files in the plurality of formats, the scanning module being communicatively coupled to the reception module;

- a gleaning module, configured to glean file attributes concerning each of the plurality of scanned files in the plurality of formats, the gleaning module being communicatively coupled to the scanning module;

- a storage module, configured to store gleaned file attributes concerning each of the plurality of scanned files as records in a database, the storage module being communicatively coupled to the gleaning module; and

- an indexing module, configured to index file attributes being stored as a record in the database concerning a specific file according to contents of that specific file, the indexing module being communicatively coupled to the storage module.

17. (currently amended) The computer system of claim 16 wherein:

- the gleaning module is further configured to glean specific file attributes concerning a specific file which are a function of a protocol according to which the specific file is transmitted.

18. (currently amended) The computer system of claim 16 wherein:

- the gleaning module is further configured to glean specific file attributes concerning a specific file which are a function of the format of that specific file.

19. (currently amended) The computer system of claim 16 wherein:

- the indexing module is further configured to index file attributes being stored as a record in the database concerning a specific file according to a secure hash of the contents of that specific file.

20. (currently amended) The computer system of claim 16 wherein:
the indexing module is further configured to index file attributes being stored as a record in the database concerning a specific file according to a cyclical redundancy check of the contents of that specific file.
21. (currently amended) The computer system of claim 16 wherein:
the reception module is further configured to receive a plurality of copies of the same file; and
the storage module is further configured to store a separate record for each received copy of the file, each separate record being indexed according to the contents of the file, such that each separate record can be accessed by ~~the~~ a single index.
22. (original) The computer system of claim 16 further comprising:
a deletion module, configured to delete records from the database after the records have been stored for a specific period of time, the deletion module being communicatively coupled to the storage module.
23. (currently amended) The method of claim 1 further comprising:
examining a file, the file having been processed by the non-application specific file attribute manager;
retrieving at least one stored record concerning the file from the database;
analyzing gleaned file attributes concerning the file, the gleaned file attributes having been retrieved from at least one record concerning the file in the database; and
responsive to analyzing the gleaned file attributes, determining a status concerning the file.
24. (original) The method of claim 23 further comprising:
responsive to determining the status of the received file to be malicious, blocking the file.
25. (original) The method of claim 23 further comprising:

responsive to determining the status of the received file to be legitimate, not blocking the file.

26. (original) The method of claim 23 further comprising:
applying at least one rule specifying how to use gleaned file attributes to process the file.
27. (original) The method of claim 26 further comprising
determining at least one of a plurality of rules to apply specifying how to use gleaned file attributes to process the file.